



Command, Control, Battle Management, and Communications

Command, Control, Battle Management, and Communications is the lynchpin of an integrated Ballistic Missile Defense System, without which there is no global layered defense. While traditional ballistic missile defense development efforts produced individual elements highly capable of addressing specific threat sets, they were only loosely connected point-to-point as a systems-of-systems – i.e., they were separate parts of a ballistic missile defense system but were not an integrated ballistic missile defense system. This loose federation of weapon systems, each with its own unique sensors, weapons, and fire control, was unable to share information and data such that the optimum sensor-weapon system combination could simultaneously address individual or multiple range threats. The Command, Control, Battle Management, and Communications program delivers integrated layered defense by networking and unifying (common purpose) individual element components (sensors, weapon systems, fire control) with all military echelons across the globe. It allows the President, Secretary of Defense, and Combatant Commanders at strategic and tactical levels to systematically plan the fight (Planner), commonly see it unfold (Situation Awareness), dynamically direct/adjust (Battle Management) networked sensors and weapons systems (Network) to optimally engage (one shot – one kill) ballistic missile threats at any range, in any phase of flight, at any time.



Planner

- Emphasizes planning of the battle during pre-hostilities (deliberate planning), imminent hostilities (crisis action planning), and/or while engaged in hostile action (dynamic replanning)
- Provides the warfighter with the flexible capability to build, analyze, and coordinate global layered defense designs across all levels of command, from strategic to operational down to tactical weapon systems

Situation Awareness

- Emphasizes a common, Single Integrated Ballistic Missile Picture from the President down to Operational Level of Command
- Provides the decision makers at all levels of command the capability to direct weapon release authority
- Provides the health of the overall Ballistic Missile Defense System and its ability to engage on multiple ranges of threats

Battle management

- Coordinates surveillance, detection, tracking, classification, engagement, and kill assessment functions
- Optimizes land-based, sea-based, and airborne sensors and commits the best land-, sea-, and air-based weapon systems

Network

- Allows for the integration of the Ballistic Missile Defense System
- Provides robust, high availability connectivity to quickly and unambiguously share information across the global BMDS

Development & Implementation Plan (includes software, hardware and network connectivity)

- Delivers rudimentary foundation for integrated, layered defense with a focus on situation awareness, basic planning, and network architecture by the end of 2005
- Completes the foundation by fielding common situation awareness and deliberative planning capability at all leadership levels, advanced battle management capability to control and task sensor-weapon system combinations, and global network management by the end of 2007
- Continues to expand geographically and incorporates additional sensors and weapons with the ability to plan and adjust the fight real-time to attain the highest probability of kill against threats in any theater, at any range, and at any time through 2009.